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In re patent application of
Reinhard DOENGES et al.
Serial No. 09/955,864
Filed: September 19, 2001

Attn. Docket: ZOU-1998DE503/cont

Group Art Unit: 1623
Examiner: Everett White

For: "Water-soluble, sulfoalkyl-containing, hydrophobically modified
Cellulose Ethers, Process for preparing them & their Use in
Emulsion Paints"

Declaration of Dr. Winfried Becker
Under 37 C.F.R. § 1.132

Honorable Commissioner for Patents
Alexandria, VA 22313-1450

I, *Winfried Becker*, declare and state that:

1. I am a resident of the Federal Republic of Germany.
2. I am a citizen of the Federal Republic of Germany.
3. I am a chemist having received a "Diplom-Chemiker" degree in chemistry from Philipps University in Marburg, Germany, and Dr. rer. nat. degrees from Philipps University in Marburg, Germany in the year 1982 and 1986 respectively.
4. I have been employed by Hoechst Aktiengesellschaft in Frankfurt/M., Germany since 1987. Since 1996, I have been working in the area of Research and Development of cellulose ether products. My current position is head of Research & Development department of SE Tylose GmbH & Co. KG. Until 1999, I was a research scientist. As of 1st of July 1997, my work contract was transferred to the legal entity Clariant GmbH which was changed and transferred again into SE Tylose GmbH & Co. KG, later on. However, my duties remained the same.

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5. I consider myself qualified by my knowledge of cellulose ether's chemistry and by my years of experience in cellulose ether processing to do experiments related with cellulose ethers and draw conclusions from these experiments.

6. I have been invited to speak at the 4th international symposium on Renewable Raw Materials "naro.tech" in September 2003 at Mainz, Germany, as well as to teach a lesson on cellulose ethers at the University of Mainz in June 1999.

7. I have read and understood the Examiner's final Official Action mailed October 27, 2003 ("the final Action").

8. In the final Action, the Examiner refers to a prior art reference, EP Patent Publication

No. 0 781 780

(the "Miyajima et al." publication), concluding that the disclosure of Miyajima et al., especially the description of the working example 6, provides a sufficient basis for the conclusion that the product of Miyajima et al. will have the same properties like the product in terms of claim 1 of the instant application.

9. In order to demonstrate that this is in fact not so, I conducted the following experiments:

The following paint formulation was prepared:

The same formulation for a satin finish paint as identified in the table on page 13 of the instant application was prepared and combined with different types of thickener, whereby the amount of paint formulation was in each example **216 parts by weight** and the amount of thickener was always **184 parts by weight**. The combination of the paint formulation with the thickener was subjected to the test for the non-drip behavior as described on page 14, line 30, to page 15, line 7, whereby a paint roller was loaded with a well defined amount of emulsion paint and rolled under defined conditions over a paint stripper grid. A black paper card was arranged under the grid

and the drips of paint landing on that black card were compared visually in terms of their number and their areal extend.

The **type of the thickener** and the result of the test for the non-drip behaviour are listed in the following table:

Example	Thickener	MS / HE	DS / HM	drip result
1 (comparison)	TV 093/01	2.12	0.018	3
2 (comparison)	BE 0150/01	2.00	0.007	5
3 (comparison)	BE 0150/06	2.20	0.013	3
4	BE 0229/07	3.21	0.020	1+
5	BE 0229/06	3.21	0.019	1
6	BE 0232/03	3.42	0.018	1+

The test results are evaluated according to the assessment as defined on page 16 in the upper table (see first line).

10. My experimental results clearly prove that the products according to Miyajima et al (see Example 1) **do not** lead to the same excellent paint properties in terms of the drip behavior like the modified hydroxyalkylcellulose in terms of claim 1 of the instant application (see right column).

The modified hydroxyalkylcellulose in terms of claim 1 differs from the modified hydroxyalkylcellulose described by Miyajima et al. in **two** features. It has (1) a higher degree of hydroxyalkylation of greater than 2.3 and it has (2) a lower degree of sulfoalkylation from 0.01 to 0.1. Both features must appear in combination, whereas the comparison examples illustratively show that only a low degree of sulfoalkylation will not be sufficient to be successful.

11. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful

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false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

May 25, 2004

Date:

W. Becker

Signature of Dr. Winfried Becker